

## PATENT ABSTRACTS OF JAPAN

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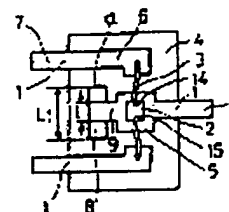
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## (54) LEAD FRAME FOR SEMICONDUCTOR DEVICE

## (57)Abstract:

PURPOSE: To prevent crack of a semiconductor element from occurring and improve reliability in an outer lead bending process by providing a reinforcing fixing part at a die pad part where the semiconductor element of a lead frame is adhered.

CONSTITUTION: In a case where a mold resin 4 on the surface of a lead frame 1 are removed, a protrusion 8 corresponding to the reinforcing fixing part is provided at the tip part within a mold resin 4 at a die pad part 5. Then, the protrusion 8 has the same thickness as the die pad part 5, is provided with a rectangular shape a having a horizontal width L1 which is longer than the width in horizontal direction of the die pad 5, and is connected to the die pad part 5 through a connection part 9 with a shorter width l than the horizontal width of this rectangular shape a. Thus, in a process for bending an outer lead 7 of the semiconductor device, the die pad 6 is pulled toward the outside and is subjected to stress. However, since a protrusion 8 is provided at the die pad 5, the protrusion 8 can be resistant at the mold resin 4 even if the die pad 5 is subjected to stress so that the stress cannot be centered to the semiconductor element 2, thus reducing the possibility that a crack may be produced at the semiconductor element 2 drastically.



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